

AMENDMENTS TO THE CLAIMS

8. (Currently Amended) A method of operating a pulse echo ranging system comprising the steps of:

providing a transducer assembly operable to send and receive high frequency acoustic energy;

transmitting, through the transducer assembly, at least two energy pulses having substantially different frequencies;

receiving reflected echoes of the at least two energy pulses at the transducer assembly and converting the reflected echo signals to received signals; and

combining the received signals to provide enhanced data.

9. (Original) A method according to claim 8, wherein the received signals are summed.

10. (Original) A method according to claim 8, wherein the received signals are differenced.

11. (Original) A method according to claim 8, wherein a signal received at a second frequency is used as a reference against which the first signal can be compared to provided enhanced data.

12. (Cancelled)

13. (New) A method of operating a pulse echo ranging system comprising the steps of:

providing a transducer assembly operable to send and receive high frequency acoustic energy;

transmitting, through the transducer assembly, at least two energy pulses having substantially different frequencies;

receiving reflected echoes of the at least two energy pulses at the transducer assembly and converting the reflected echo signals to received signals; and

summing the received signals to provide enhanced data.

14. (New) A method of operating a pulse echo ranging system comprising the steps of:

providing a transducer assembly operable to send and receive high frequency acoustic energy;

transmitting, through the transducer assembly, a first energy pulse and a second energy pulse, the second energy pulse having a frequency at least twice that of the first energy pulse;

receiving reflected echoes of the first and second energy pulses at the transducer assembly and converting the reflected echo signals to received signals; and

combining the received signals to provide enhanced data.

15. (New) A method according to claim 14, wherein the received signals are summed.

16. (New) A method according to claim 14, wherein the received signals are differenced.

REMARKS

Claims 8-11 and 13-16 are currently pending in this application. Claim 8 has been amended to correct a clerical error. Claim 12 has been cancelled without prejudice. The Examiner is thanked for the indication of allowable subject matter.